

# Review of: "Simulation of Control System for a Half-Car Suspension System for Passenger Vehicle Application by Designing an LQR Controller"

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Potential competing interests: No potential competing interests to declare.

The article lacks a clear specification of its novelty, requiring several modifications for acceptability. The adoption of LQR isn't a new concept. The Introduction section lacks crucial information and critical evaluations of the research area, impacting the study's motivation. The paper needs better alignment with the current state of the art, with authors explicitly illustrating the novelty they bring.

The last paragraph of Section I lacks references, necessitating inclusion. A detailed discussion and comparison between the paper and existing approaches are needed. English corrections are required for some sentences. Additionally, recent literature should supplement the given sources. The mention of 'environmental protection and fuel efficiency' in the introduction feels disconnected from the paper's scope.

The technical originality here appears weak. Despite numerous works on optimal control for suspension systems aiming at ride comfort and road holding, this work lacks impressive results and a comparative study with alternative approaches to justify its adoption.